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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/736,846	12/12/2000	Edward C. Guerrero JR.	5500-64600	7034
75	90 07/18/2003			
Robert C. Kowert Conley, Rose & Tayon, P.C. P.O. Box 398			EXAMINER	
			NGUYEN, DANNY	
Austin, TX 787	767-0398		ART UNIT PAPER NUMBER	
			2836	
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DATE MAILED: 07/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary		Application No.	Applicant(s)			
		09/736,846	GUERRERO ET AL.			
		Examiner	Art Unit	*		
		Danny Nguyen	2836			
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the o	correspondence address			
THE - Exte after - If the - If NO - Failu - Any	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed  vs will be considered timely.  the mailing date of this communicati D (35 U.S.C. § 133).	on.		
1)⊠	Responsive to communication(s) filed on 05 M	<u>//ay 2003</u> .				
2a)[	This action is <b>FINAL</b> . 2b)⊠ Th	is action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
Dispositi	closed in accordance with the practice under a ion of Claims	Ex parte Quayle, 1935 C.D. 11, 4	153 O.G. 213.			
	Claim(s) 1-22 is/are pending in the application			-		
	4a) Of the above claim(s) is/are withdraw					
	Claim(s) is/are allowed.					
6)⊠	Claim(s) <u>1-22</u> is/are rejected.					
7)	Claim(s) is/are objected to.					
8)[	Claim(s) are subject to restriction and/or	election requirement.				
Applicati	on Papers					
9)[	The specification is objected to by the Examiner					
10) 🔲 -	The drawing(s) filed on is/are: a)□ accep	ted or b)☐ objected to by the Exa	miner.			
—	Applicant may not request that any objection to the		• •	•		
11)	The proposed drawing correction filed on		eved by the Examiner.			
40)□-	If approved, corrected drawings are required in rep	•				
	The oath or declaration is objected to by the Exa	aminer.				
_	inder 35 U.S.C. §§ 119 and 120					
_	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a	)-(d) or (f).			
a)[	☐ All b)☐ Some * c)☐ None of:					
	1. Certified copies of the priority documents					
	2. Certified copies of the priority documents					
	3. Copies of the certified copies of the priori application from the International Bur see the attached detailed Office action for a list of	eau (PCT Rule 17.2(a)).	· ·			
14) 🗌 A	cknowledgment is made of a claim for domestic	priority under 35 U.S.C. § 119(e	e) (to a provisional applicat	ion).		
	) ☐ The translation of the foreign language prov cknowledgment is made of a claim for domestion					
Attachment	(s)					
2) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal P	(PTO-413) Paper No(s) Patent Application (PTO-152)			
S. Patent and Tr	ademark Office					

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#### **DETAILED ACTION**

1. Applicant's arguments, see pages 2-6, filed 5-5-2003, with respect to the rejection(s)of claim(s) 1, 12, 21 under 35 U.S.C 102 and 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Budelman (USPN 5,629,608).

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1, 3-12, 14-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Buldelman (U.S. Patent No. 5,629,608).

Regarding to claims 1, and 12, Budelman discloses a computer system (fig. 3) comprises a system memory (such as 330), a voltage regulator (400 shown in fig. 3) to provide a supply voltage to a plurality of components (such as devices 320, 330, 340, and 350) wherein one of the components is a switching regulator (450 see fig. 4) is configured to regulate the supply voltage and to provide a termination voltage to devices (col. 4, lines 15-34), a clamping circuit (comprises 430 and 450) comprises a detect stage (such as 735 shown in fig. 7) and clamping stage (742), wherein the detecting stage (735) activates the clamping stage (comprising 742 and 750) when the supply

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voltage exceeds a first voltage level (col. 2, lines 41-50), and the clamping voltage is connected to the detecting stage and reduces the supply voltage in response by the detecting stage (col. 7, lines 10-23).

Regarding to claims 3 and 15, Budelman discloses that the detecting stage (735) is a voltage divider (shown in fig. 7) connected to the supply voltage (the voltage supply from 420) to monitor the supply voltage, wherein the divider provides a voltage to activate the clamp stage (comprising 742 and 750) when the supply voltage exceeds the first voltage level (col. 7, lines 10-14).

Regarding to claims 4-6, 16-18, Budelman discloses that the clamping stage (742) reduces the supply voltage by shunting current to ground and the claming stage is a shunt regulator (750) (see col. 7, lines 14-16).

Regarding to claim 19, Budelman discloses the clamping is done quickly enough that the supply voltage does not exceed the maximum level (col. 7, lines 5-10).

Regarding to claims 7- 9, and 20, Budelman discloses that the first voltage level is lower than a maximum voltage level, wherein the maximum voltage level that causes erroneous behavior in a first portion of the components provided with the supply voltage (see col. 7, lines 10-16).

Regarding to claims 10, 11, and 14, Budelman discloses that the clamping stage (742 and 750) is configured to not activate when the supply voltage does not exceed the first voltage level (col. 7, lines 16-23).

Regarding to claim 21, Budelman discloses that a clamping circuit comprises a voltage divider (shown in fig. 7) connected to a shunt regulator (752), wherein the

voltage divider applies an input voltage to the shunt regulator, wherein the voltage divider is configured so that the input voltage is greater than or equal to a reference voltage of the shunt regulator when the voltage on a voltage rail is greater or equal to a first voltage level (see col. 4, lines 4-7), and wherein the voltage divider is configured so that the input voltage is less than the reference voltage level when the voltage rail is less than the first voltage level; the shunt regulator connected to the voltage divider, wherein the shunt regulator turns on when the input voltage is greater than or equal to the reference voltage level and turns off when the input voltage is less the reference voltage level; and a transistor (750) coupled to the voltage rail and to the shunt regulator (742), wherein the transistor turns on in response to the shunt regulator turning on, wherein the transistor sinks current from the voltage rail when the transistor is on to decrease the voltage rail below the first voltage and the transistor turns on and off the shunt regulator (col. 7, lines 14-23).

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 2 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Budelman in view of Lee et. al. (U.S. Patent No. 5,920,511), Budelman discloses the memory, but does not disclose the memory is DDR-SDRAM. Lee et. al. disclose the

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various types of memory can be used to store data (including memory DDR-SDRAM) (see col. 1, lines 10-16). It would have been obvious to one ordinary skill in the art to substitute the memory of Budelman with DDR-SDRAM memory as taught by Lee et al. in order to access date faster.

4. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Budelman in view of Taylor (U.S. Patent No. 5,34,58). Budelman does not disclose a resistor as claimed Taylor et al. disclose a resistor (R3). It would have been obvious to one ordinary skill in the art to modify the circuit of Budelman a resistor as taught by Taylor et al. in order to reduce crossing voltage.

## Response to Arguments

5. Regarding to claims 1, 12, applicant argued that Budelman reference does not disclose a switching regulator receiving a voltage supply from a voltage regulator and a termination voltage to the memory system. However, Budelman disclose a switch regulator (450) receiving a voltage supply from a voltage regulator (420), and the output terminal from the regulation device (440) supplies power to main memory (330) (see col. 4, lines 13-15). Therefore, the applicant's arguments do not over the Budelman reference.

#### Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Nguyen whose telephone number is (703)-305-5988. The examiner can normally be reached on Mon to Fri 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (703)-308-3119. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-305-1341 for regular communications and (703)-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.

D.N.

July 9, 2003

REGØ*RIV I.* Toatyley, Jr Primary Examiner